

ANNEX

Local Hazard Mitigation Plan

City of Saratoga

Introduction

The City of Saratoga is a small-sized city located in the western region of Santa Clara County, California. The City has a population of 29,843 people, based on the 2000 census¹. For Fiscal Year 2006/2007, the City's total general fund budget is \$10,807,400. The City employs 56 full time equivalents with additional temporary and seasonal workers. Law enforcement services are provided under contract with the Santa Clara County Sheriff's Office, and fire services are provided jointly by the Santa Clara County Fire Department and the Saratoga Fire Protection District.

The Planning Process

The process of preparing this plan was familiar to the City of Saratoga. The City has a Seismic Safety and Safety Element to its General Plan that includes a discussion of fire, earthquake, hazardous materials and flooding hazards. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA), which, since 1988, have required mitigation for identified natural hazards. The City's effort has focused on building on these pre-existing programs and identifying gaps that may lead to disaster vulnerabilities, in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the City of Saratoga were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG workshops and meetings, including the general "kick-off" meeting. In addition, the City has provided written and oral comments on the multi-jurisdictional plan. Finally, the City provided information on facilities that are viewed as "critical" to ABAG.

Key staff met to identify and prioritize mitigation strategies appropriate for the City. Staff involved in these meetings included the Community Development Director, Building Official, Public Works Director and Assistant City Manager, who is also the City's Emergency Services Manager, together with representatives from the Santa Clara County Sheriff's Office, Santa Clara County Fire Department and Saratoga Fire Protection District. The City provided the opportunity for the public to comment on the DRAFT mitigation strategies selected by City staff at the City Council meeting on February 7, 2007. The resolution adopting the plan and strategies was on the City Council agenda on April 4, 2007. The mitigation strategies will become an implementation appendix to the Seismic Safety and Safety Element of the City's General Plan.

¹ For complete Census information on this city, see <http://www.bayareacensus.ca.gov/>.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards also impact this community, except for tsunamis, based on the City of Saratoga's location in the Bay Area.

The City has undertaken a number of general hazard mapping activities, which are included in the Seismic Safety and Safety Element. These maps may not be as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

Information on disasters declared in Santa Clara County is available at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

The City examined the hazard exposure of City urban and non-urban land based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 7,785 acres (7,242 urban and 544 non-urban) in the City,

- ◆ Earthquake faulting – While no active faults are mapped in the city by the California Geological Survey as part of the Alquist-Priolo Earthquake Fault Zoning Act, maps of Known Active Near-Source Zones prepared for use with the 1997 Uniform Building Code indicate that most of the City is located within 2 km of a designated active Type B fault termed the "Monte Vista-Shannon Fault". This seismic source actually includes several different traces of front-range thrust faults including the Berrocal, Monta Vista, Shannon and other unnamed and poorly identified faults of uncertain activity. The activity and locations of these fault traces is currently a subject of ongoing research by the U.S. Geological Survey. New residential development proposed over or near these fault traces must be supported by a Fault Hazard Investigation (report) that is evaluated during the City's Geotechnical Peer Review process.
- ◆ Earthquake shaking – 7,752 acres are in the two highest categories of shaking potential, in large part because of the City's location on the Santa Clara Valley floor.
- ◆ Earthquake-induced landslides – the California Geological Survey has reported 3,677 acres are not in their study zone, 498 acres are within their study zone and 3,611 have not yet been evaluated.
- ◆ Earthquake liquefaction – 960 acres are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis – Based on the City's location, tsunamis are not a hazard.
- ◆ Flooding – 104 acres are in the 100-year flood plain, while an additional 7,392 acres are in other less flood-prone areas; the remainder is not subject to flooding.
- ◆ Landslides – 482 acres were classified as within a "mostly landslide area" while 2,688 acres were designated "few landslides"; the remainder had no landslides.
- ◆ Wildfires – 5,822 acres are in wildland-urban interface threat areas although only 466 acres were considered high, 254 very high and 0 extreme threat.
- ◆ Dam Inundation – 77 acres are subject to dam inundation.
- ◆ Drought – all 7,785 acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 179 miles of roadway in the City,

- ♦ Earthquake faulting – See urban and non-urban land use above.
- ♦ Earthquake shaking – 178 miles of roadway are within the highest two categories of shaking potential.
- ♦ Earthquake-induced landslides – of the 179 miles of roadway, the California Geological Survey has included 12 miles in their study zone; 17 miles have yet to be evaluated.
- ♦ Earthquake liquefaction – 24 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility.
- ♦ Tsunamis – Based on the City's location, tsunamis are not a hazard in the City of Saratoga.
- ♦ Flooding – 2 miles of roadway are in the 100-year flood plain, while an additional 170 miles are in other less flood-prone areas; the remainder is not subject to flooding.
- ♦ Landslides – 7 miles of road are within existing landslide areas and an additional 48 miles were designated as subject to few landslides.
- ♦ Wildfires – 13 miles of roadway are subject to high or very high wildfire threat; 117 miles of roads are in wildland-urban interface threat areas.
- ♦ Dam Inundation – 2 miles of roadway are in an area subject to dam inundation.
- ♦ Drought – is not a hazard for roadways.

Finally, the City examined the hazard exposure of critical health care facilities, schools, and city-owned buildings based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickcrit.html>. Of the critical facilities in the City,

- ♦ Earthquake faulting – See urban and non-urban land use above.
- ♦ Earthquake shaking – Three long term care facilities, 11 schools, and 31 public facilities (owned by the City, County or a school district) are in the highest two categories of shaking potential.
- ♦ Earthquake-induced landslides – no critical facilities are located in such areas.
- ♦ Earthquake liquefaction – No critical health care facilities are in areas of moderate, high, or very high liquefaction susceptibility. However, three City-owned facilities and one school are located in an area of moderate earthquake liquefaction susceptibility.
- ♦ Tsunamis – Based on the City's location, tsunamis are not a hazard in the City of Saratoga.
- ♦ Flooding – Four city-owned facilities are in the 100-year flood plain. Two long term health care facilities, 12 schools, 27 public facilities are located in other less flood-prone areas.
- ♦ Landslides – One long term care facility and one public facility are located in areas with "few landslides"; 9 public facilities are in locations designated "mostly a landslide area"
- ♦ Wildfires – one public facility is located in a very high wildfire threat area.
- ♦ Dam Inundation – No critical facilities are subject to dam inundation.

- ♦ Drought – Drought will not affect city buildings directly. Additionally, the City does not operate a water-supply distribution system.

In spite of the areas of the City located in flood-prone areas, there are no repetitive loss properties in the City based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

The City plans to work with ABAG during 2007 to improve the risk assessment information being compiled by ABAG by providing information on unreinforced masonry buildings and soft-story apartments located in the City. All unreinforced masonry buildings in the City have been retrofitted for life safety.

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and various water supply agencies on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities which might result from any of the hazards previously noted.

As these impacts are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking) and flooding pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Saratoga staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at various meetings with the Community Development Director, Building Official, Public Works Director, Assistant City Manager and representatives from the Santa Clara County Sheriff's Office, Santa Clara County Fire Department and Saratoga Fire Protection District. At these meetings, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies involve existing City programs.

These draft priorities were submitted to the City Manager, Santa Clara County Fire, Saratoga Fire Department and the Santa Clara County Sheriff's Office for review. The draft priorities were then provided to the City Council on February 7, 2007. The public was provided with an opportunity to comment on the DRAFT priorities. The final strategies (as shown in the attached Table) will become an *Implementation Appendix* to the City's Seismic Safety and Safety Element.

The Plan Maintenance and Update Process

The City Manager's Office will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the meeting of City department heads at least once a year in April. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The City of Saratoga is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City's Assistant City Manager will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.